AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1-22. (Canceled)

23. (Currently Amended) A method for the production of core-shell (CS) particles and/or microcapsules, comprising:

~~preparing~~ providing porous templates, the templates being porous organic and/or inorganic microparticles having a diameter of less than 100 μm;

adsorbing in the porous templates at least one active compound to be encapsulated;

applying at least one primer layer to the porous templates; and

forming a capsule shell around the porous templates provided with the primer layer by applying coating materials comprising at least one of alternately charged poly-electrolyte layers and nanoparticle layers to the porous templates, wherein the primer layer is formed from a material which closes pores of the porous templates and is largely impermeable to the coating materials applied in the formation of the capsule shell.

24. (Previously Presented) The method as claimed in claim 23, wherein the pores have a pore width of 0.3 nm - 100 nm and preferably of 1 nm - 30 nm.

25. (Previously Presented) The method as claimed in claim 23, wherein the templates comprise at least one of porous silica particles, porous zeolite particles, and porous polystyrene particles.

26. (Previously Presented) The method as claimed in claim 25, wherein the porous silica particles range in size from 100 nm to 100 μm and preferably from 500 nm to 30 μm.

27. (Previously Presented) The method as claimed in claim 25, wherein the porous zeolite particles have a pore width of 0.3 nm to 10 nm.

28. (Previously Presented) The method as claimed in claim 23, wherein the at least one active compound to be encapsulated comprises at least one of a polymer, a protein, an organic molecule having a molecular weight of over 100 g/mol, a nanoparticle, an enzyme, a catalyst, a dye, a pharmaceutical or cosmetic active compound, and a plant protection agent.

29. (Previously Presented) The method as claimed in claim 23, wherein at least one auxiliary is used for mediating the adsorption of the at least one active compound.

30. (Previously Presented) The method as claimed in claim 23, wherein the at least one active compound comprises poly-electrolytes and/or nanoparticles and wherein a surface of the pores is coated by a number of layers of alternately charged poly-electrolytes and/or nanoparticles.

31. (Previously Presented) The method as claimed in claim 29, wherein the porous templates are prepared in a solution and, additionally or alternatively to the auxiliary, the adsorption of the at least one active compound is controlled by changing the pH of the solution.

32. (Previously Presented) The method as claimed in claim 23, further comprising dissolving the porous templates after formation of the capsule shell to form the microcapsules.

33. (Previously Presented) The method as claimed in claim 25, further comprising dissolving silica and/or zeolite templates by fluoride salts in the presence of a buffer solution having a pH between 3.5 and 6.

34-43. (Canceled)

44. (Previously Presented) A core-shell (CS) particle having:
a diameter of less than 100 μm;
a porous core in which at least one active compound is adsorbed;
a primer layer which surrounds the porous core; and

a capsule shell comprising a number of layers alternately charged polyelectrolyte and/or nanoparticle layers, wherein the primer layer comprises a material which closes pores of the porous core and is largely impermeable to the layers of the capsule shell.

45. (Previously Presented) The CS particle as claimed in claim 44, wherein the pores of the porous core have a pore width of 0.3 nm - 100 nm and preferably of 1 nm - 30 nm.

46. (Previously Presented) The CS particle as claimed in claim 44, wherein the core comprises a porous organic and/or inorganic microparticle having a diameter less than 100 μm.

47. (Previously Presented) The CS particle as claimed in claim 44, wherein the core comprises at least one of a porous silica particle, a porous zeolite particle, and a porous polystyrene particle.

48. (Previously Presented) The CS particle as claimed in claim 44, wherein the core comprises a porous silica particle ranging in size from 100 nm to 100 μm and preferably from 500 nm to 30 μm.

49. (Previously Presented) The CS particle as claimed in claim 44, wherein the core comprises a porous zeolite particle having a pore width of 0.3 nm to 10 nm.

50. (Previously Presented) The CS particle as claimed in claim 44, wherein the at least one active compound comprises at least one of a protein, a polymer, an enzyme, a catalyst, a dye, and a nanoparticle.

51. (Previously Presented) A microcapsule having:

a diameter of less than 100 μm;

a capsule shell comprising a number of layers of alternately charged polyelectrolyte and/or nanoparticle layers;

a primer layer on the inside of the capsule shell; and

an inner framework of polyelectrolyte complexes and/or polyelectrolyte/nanoparticle complexes, which is surrounded by the primer layer and the capsule shell.

52. (Previously Presented) The microcapsule as claimed in claim 51, wherein the primer layer and the capsule shell comprise different materials.

53. (Currently Amended) A method for the production of microcapsules, comprising:

~~preparing~~ providing at least one porous template, the template being a porous organic and/or inorganic microparticle having a diameter of less than 100 μm;

coating the surface of pores of the porous template with a number of layers of alternately charged poly-electrolytes and nanoparticles;

applying at least one primer layer to the porous template;

forming a capsule shell around the porous template provided with the primer layer by applying coating materials comprising at least one of alternately charged poly-electrolyte and nanoparticle layers to the porous template, the primer layer being formed from a material which closes the pores of the porous template and is largely impermeable to the coating materials applied during the formation of the capsule shell; and

dissolving the porous template.